between time taken to make risky ($t(28) = -1.28$, $p = \text{ns}$) and non-risky choices ($t(28) = -1.06$, $p = \text{ns}$). Similarly, no difference was found for change in risky choice selection in presence of the drug ($t(28) = -1.41$, $p = \text{ns}$). No differences were found in the traditional reinforcement learning parameters between the groups.

Conclusions Using a novel computational analysis, we showed that dopaminergic medication increased the preference to select a risky choice by modulating drift rate and response bias which was not captured by the behavioural measures. Critically we observe an effect on response bias highlighting the role of *apriori* information in influencing risky decision making.

44 LIFESPAN OF NEGATIVE EXPERIENCES IN FUNCTIONAL NEUROLOGICAL DISORDER PATIENTS

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Aims Exploration of the relationship between negative life experiences and patients with Functional Neurological Disorder (FND), by analysing patient and non-clinical group responses to a new questionnaire called the Lifespan of Negative Experiences Scale (LiNES). LiNES was designed to examine predisposing vulnerabilities and perpetuating factors in individuals with FND by retrospectively assessing experiences of interpersonal trauma, affect and relationship insecurity at three developmental stages – childhood, adolescence and adulthood.

Methods LiNES, CATS (measure of childhood abuse and trauma), RSQ (measure of relationship insecurity) and PANAS (measure of affect) questionnaires were administered to 71 individuals with FND. Analyses were conducted to assess the reliability of the LiNES, explore correlations between different psychological domains within the FND group and to test whether LiNES scores predicted FND group membership. In addition, FND patients' responses were compared to 270 matched healthy controls.

Results The LiNES subscales had high internal consistency and correlated with CATS, RSQ and PANAS. Levels of interpersonal trauma were higher in FND patients than controls during childhood, adolescence and adulthood. High levels of negative affect were found in FND patients in adulthood compared to controls but no significant differences were found between FND patients and controls in relationship insecurity at any developmental stage. On the RSQ, FND patients had higher anxious and avoidant relationship styles. LiNES trauma scores at each developmental stage predicted FND status with over 80% accuracy. Additionally, FND patients self-reported more symptoms (SDQ-20) and a higher prevalence of comorbid conditions compared to controls.

Conclusions The LiNES is a new brief retrospective measure of negative life experiences. Although psychological factors may not be necessary to the diagnosis of FND, they are substantially more common in FND patients compared to controls. In particular, a history of interpersonal trauma seems to play an important role in those with FND. These factors

therefore are likely to play a pathophysiological role in many patients and their recognition is important for treatment. This study provides new insights into the association between the timing of negative experiences and the subsequent effect on an individual. Furthermore, the results support the use of LiNES as a valid screening tool in the clinical setting in patients presenting with functional symptoms with diagnostic and therapeutic implications.

45 FUNCTIONAL NEUROLOGICAL DISORDER IN GERIATRIC REHABILITATION: INCIDENCE, CLINICAL PRESENTATIONS, AND IMPACT ON DISCHARGE

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Background/Aims Functional neurological disorder (FND) may be present amongst elderly people in hospital. FND could hinder patients' rehabilitation progress and impact negatively on discharge outcomes. Little data exist for FND in the elderly. We aimed to report the incidence of FND, clinical presentations, co-morbidities, and impact of FND on discharge in elderly patients receiving inpatient rehabilitation.

Methods In our retrospective case series, a consultant geriatrician reviewed electronic case notes of consecutive discharges from a 28-bed geriatric rehabilitation unit at St John's Hospital, which serves all patients requiring inpatient rehabilitation in West Lothian—a mixed rural and urban area with a population of 180 000 and high levels of deprivation. Data collected: demographics, suspected/definite diagnosis of FND and its presentation, significant co-morbidities and impact on discharge.

Results We reviewed case notes of 100 patients discharged consecutively from 30/3/2018 to 30/10/2018 (age range 41–101, mean 79, SD 11; 55% men). 20% received a diagnosis of suspected or definite FND. FND diagnosis was made by a geriatrician (17%) or a neurologist (3%). Clinical description of FND cases and their co-morbidities will be presented in a summary table. Of the 20 FND cases (mean age 77, SD 14), 9/20 (45%) were men. FND impacted on discharges in 13/20 (8/20 had delayed discharge, 5/20 had increased care needs, 7/20 had no impact on discharge).

Conclusion

Key finding FND was common amongst elderly patients receiving inpatient rehabilitation. FND presentations were varied. Patients with FND also had chronic conditions common in the elderly e.g. Parkinson's disease, stroke, dementia, anxiety or depression.

Weakness and strength of our study Assessor bias might be introduced as diagnosis was made by a geriatrician with an interest in neuropsychiatry. Our data are likely generalisable to the geriatric rehabilitation population as sample was obtained from the only unit that served the entire population of West Lothian.

Implications for future research and practice FND presents a unique challenge in the geriatric population. Geriatricians are not accustomed to assessing and managing FND, sometimes dismissing symptoms as 'behavioural'. This can lead to symptoms remaining unexplained and untreated. Specialist neurology or neuropsychiatry services are not always available.

The identification of FND and its effective treatment during rehabilitation could have potential impact on hospital length of

stay and associated cost. Further research in FND in the elderly is needed. Better education would raise awareness of FND amongst geriatricians and thus its identification in clinical practice.

46 PREDICTORS OF DELIRIUM IN PATIENTS ADMITTED IN A GENERAL HOSPITAL

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Background/Aims Delirium is associated with numerous complications such as physical problems, cognitive impairment, prolonged hospital stay and increased mortality rates. Therefore, the diagnosis and prevention of delirium is an essential issue in admitted patients care. The purpose of this study was to investigate the prevalence and risk factors of delirium in a general hospital.

Materials and methods This study has a descriptive method done on 220 samples between 2017 to 2018. Subjects were recruited among all adult patients admitted to the general hospital who had a Richmond Agitation Sedation Scale (RASS scale) of more than 3. Patients with decrease in the level of consciousness who were unable to answer questions and patients who were admitted to the Intensive care unit were excluded. After primary assessment, demographic data were obtained and secondly the rate of delirium was evaluated by using CAM (Confusion Assessment Method).

Results The prevalence of delirium was 10% in hospital admissions. The rate of delirium was in emergency ward (31.3%), hematology (22.2%), internal medicine (11.6%) and surgery (2.4%). The prevalence of delirium increased with age, visual deficits, sleep disorders, dementia, and neurological diseases, diabetes and malignancies. The use of antibiotics, analgesics and sedative agents was associated with an increase in delirium, but only there was a significant relation with the use of anticoagulants.

Conclusions Delirium almost has been detected in all general hospital wards and its prevalence was related to age, visual problems, sleep disturbances, existence of dementia and neurological diseases and the usage of anticoagulant agents.

47 UNDERGRADUATE TEACHING AND PERCEPTIONS OF FUNCTIONAL NEUROLOGICAL DISORDERS

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Objectives To explore the level of teaching given to medical students on functional neurological disorders (FND), and whether this was considered sufficient. In addition, to assess the understanding and perceptions of FND within the medical student population.

Methods Data were collected over 2 weeks from University of Bristol medical students through use of an online survey. This

comprised of 2 open questions exploring personal opinions on the extent of teaching and aetiology of FND, and a further 21 closed questions on student demographics, clinical experience and teaching.

Results The level of teaching was viewed by the majority (27/44) to be insufficient and most students would value more training. When provided, FND teaching was delivered during psychiatry rotations. 34% (15/44) of students had not encountered FND before. Of those that had, 58% (17/29) gained awareness of FND through medical school. Students estimated 63% of cases were associated with a recent stressful life event and additionally 75% (33/44) believed FND symptoms were not 'faked'.

Conclusions The level of teaching was viewed as being inadequate and in general the students would value more. Despite this, the majority held positive attitudes towards FND. This study recommends integration of evidence-based teaching on FND into the medical school curriculum.

48 UNDERSTANDING THE CURRENT CHALLENGES IN NEUROPSYCHIATRY: MODELLING CARE AND TREATMENT

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Background Neuropsychiatry is an emerging field of medicine which links neurology and psychiatry. The convergence of neuropsychiatry comes in the wake of the advancements in neuroscience, genomics and neuroimaging including analytic technology. Data Analytics and Artificial intelligence (AI) brought a paradigm shift in the treatment of many diseases. However, innovation in health care technology often outpaces innovation in disease management. Healthcare decision makers are considering economic modelling in an effort to optimise patient services, care and treatment. Recently, NHS England proposed a Five Year Forward View to set out a future vision for a new model of care for patients. We seek to employ data intelligence to explore some of the issues associated with neuropsychiatry for a better understanding of disease management and decision making.

Objective/Aims We aim to evaluate the whole neuropsychiatry pathways of care and treatment to optimise clinical outcomes across the NHS Trusts. We will assess the current status of primary care, secondary care and acute care to provide an economic model of neuropsychiatry. We will evaluate current methods of care to provide a better tool for neuropsychiatric disease management.

Methods We analyse econometrics data related to specific neuropsychiatric diseases. The data is gathered from NHS Digital, Office of National Statistics, and Public Health England. Pattern recognition, real time responsive solutions, optimisation, predictive models, whole system approaches and explanative models is used. Data is processed by cleaning, pulling, filtering, mining, and extraction to address the relevant questions.

Result Economic models in neuropsychiatry are important for providing optimum patient care and treatment. Limitations in quality management and pathway methodologies create gaps in the delivery of care. The implementation of new frameworks of care and service is an essential tool for disease management and clinical outcomes.